

ABSTRACT

A fluid conveying machine has a rotational shaft (11), a double suction type pump (16), and magnetic levitation motors (12, 13) having a function as a radial magnetic bearing for supporting the rotational shaft (11) in a non-contact manner and as a motor for rotating the rotational shaft (11). The double suction type pump (16) has a double suction type impeller (21) attached to the rotational shaft (11), a pump casing (31) disposed so as to surround the impeller (21), and a pressure balance mechanism for positioning the rotational shaft (11) in an axial direction. The pump (16) is disposed substantially at a center of the rotational shaft (11), and the two magnetic levitation motors (12, 13) are disposed on both sides of the pump (16).